

Executive Order: A-314-0334

New Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles

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Pursuant to the authority vested in California Air Resources Board by Health and Safety Code (HSC), Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by HSC Sections 39515 and 39516 and Executive Order G-14-012;

IT IS ORDERED AND RESOLVED: That the following exhaust and evaporative emission control systems produced by the manufacturer are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

					TEST GR	OUP II	NFOR	MATION				
MODE	- 1 - 1	EST GROUP		VEHIC	LE CLASS(I	ES)	4549	FUEL C	ATEGORY	FUEL TYPE		
2020	LK	MXV02.4DH3		indere til abk Minderejele	PC		Gellin Milia		SINGLE FUEL HICLE	192 100	GASOLINE	
1 1-4	USEFUL	. LIFE (miles)		VEH	IICLE EMIS	SION C	CATE	ORY	INTERIM / IN	TERI	MEDIATE IN-USE STD	
EXH	I/ORVR	EVAF			FTP	S 5 3 8	SF	TP .	FTP		SFTP	
15	0000	15000	0	LEV3	SULEV30	LEV	3 CC	MPOSITE	PM		PM - PM	
SPE	CIAL FE	ATURES & E.	KHA STE		ON CONTRO	OL		OBD S	TATUS	E	NGINE DISPLACEMENT (L)	
1	D	FI, WR-H02	, н	O2S, WU-TW	C, TWC			FULL	ALL MODELS		Model of consequent	
*				*			PARTIAL *		2.4			
*	* *						PARTIAL WITH *					
		. E	VAF	ORATIVE &	REFUELING	G (EVA	P/OR	VR) FAMILY	INFORMATION			
EVA	P / ORV	R FAMILY	E۱	/APORATIVE	STD CATE	GORY	EVAP EMISSION STD VEHICLE CLASS			SPECIAL FEATURES		
I	LKMXR01	40DHG		LEV 3	OPTION1		PC			HCT		
				E	MISSION C	REDIT	ΓINFO	RMATION				
	EDIT FO	X FLEET AVE OR EXTENDED RRANTY			EDIT FOR I		ZEV NMOG CREDIT FOR DOR		1	OPTIONAL EXH. STD FOR WORK TRUCKS		
		N			N		n n				N	
				NMOG	AND FLEE	TAVE	RAGE	INFORMA	ΓΙΟΝ			
NMOG RAF	CH4 RAF	FTP NMOG/NMH RATIO	Н	CHO/NMHC RATIO	PC+ D 10-374						MOG+NOX FLEET STD MDV (10,001-14,000 GVWR) (g/mi)	
*	*	1.10	T	*		0.065	0.074				*	

See the Attachment for Vehicle Models, Evaporative Family, Engine Displacement, Emission Control Systems, Phase-In Standards, OBD Compliance, Emission Standards and Certification Levels, and Abbreviations. (As applicable, heavy-duty vehicles (HDV) over 14,000 pounds in GVWR listed in this Executive Order are certified to the requirements in 13 CCR Section 1961.2 applicable to MDV pursuant to 13 CCR Section 1956.8(c)(3) or 13 CCR Section 1956.8(h)(5), as applicable.)



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BE IT FURTHER RESOLVED:

The exhaust and evaporative emission standards and the certification emission levels for the listed vehicles are as listed on the Attachment. Compliance with the 50° Fahrenheit testing requirement may have been met based on the manufacturer's submitted compliance plan in lieu of testing. Any debit in the manufacturer's fleet average compliance requirement for NMOG+NOx or Vehicle Equivalent Credit (13 CCR Sections 1961.2(b)(1), 1961.2(b)(3), or 1961.2(c) (3), and the incorporated test procedures, as applicable), or Greenhouse Gas Emissions (13 CCR Section 1961.3, or 17 CCR Section 95663, and the incorporated test procedures, as applicable), for PC, LDT, MDPV or MDV shall be equalized as required.

BE IT FURTHER RESOLVED:

Executed at El Monte, California on this

noc Mande Cej Vols Britis (1977)

For the listed vehicle models, the manufacturer has attested to compliance with Title 13, California Code of Regulations, (13 CCR) Sections 1965 [emission control labels], 1968.2 [on-board diagnostic, full or partial compliance], 2035 et seq. [emission control warranty], 2235 [fuel tank fill pipes and openings] (gasoline and alcohol fueled vehicles only), and "High-Altitude Requirements" and "Inspection and Maintenance Emission Standards" (California 2015 and Subsequent Model Criteria Pollutant Exhaust Emission Standards and Test Procedures and 2017 and Subsequent Model Greenhouse Gas Exhaust Emission Standards and Test Procedures for PC, LDT and MDV).

day of June 2019.

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See une kracetse. I 15 Vrinde Models Esépontive Family. Engine Sigo doment Emission Control Eystéing, Phase a Candulos Da D Societ y de Entrado Santonés ada Centronian Levels, and observations. (As approachs, teatyment, ventilias (PCP et al TASCO et al Color OVARI leséd le that Exactilise Order atalegative distribu

Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

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Allen Lyons, Chief

OFFICE OF SECURITY OF THE SECURITY OF SECU

Emissions Compliance, Automotive Regulations and Science Division



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ATTACHMENT

EXHAUST AND EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS (FTP, HWFET, 50°F, 20°F)

CH4: methane; NMOG: non-CH4 organic gas; HC: hydrocarbon; NMHC: non-CH4 HC; CO: carbon monoxide; NOx: oxides of nitrogen; HCHO: formaldehyde; PM: particulate matter; RAF: reactivity adjustment factor; 2DHS/3DHS [g HC/test]: 2/3 days diurnal+hot-soak; RL [g HC/mi]: running loss; ORVR [g HC/gallon dispensed]: on-board refueling vapor recovery; g: gram; mg: milligram; mi: mile; K: 1000 miles; F: degrees Fahrenheit; FTP: federal test procedure; SFTP: supplemental FTP

FUEL TYPE

			i+NOx mi)		O mi)	NC (g/i		HC (mg	HO /mi)		M mi)
		CERT	STD	CERT	STD	CERT	STD	CERT	STD	CERT	STD
FTP@50K	*	*	*	* 1.12	*	*	*	*	*	*	*
FTP@UL	GASOLINE- TIER3 E10	0.020	0.030	0.4	1.0	*	*	*	4	0.001	0.003
50°F @4K	GASOLINE- TIER3 E10	0.028	0.060	0.3	1.0	*	*	*	8		

The party of the second	EUEL TYPE	NMOG+N	Ox (g/mi)	CO (g/mi)		
FUEL TYPE CERT HWFET @ 50K	STD	CERT	STD			
HWFET @ 50K	***************************************	*	****			
HWFET @ UL	GASOLINE-TIER3 E10	0.011	0.030	NAGE :	A Company of the	
20°F @ 50K	COLD CO E10 REGULAR GASOLINE (TIER3)	24.8.28.65		1.1	10.0	

SFTP EXHAUST EMISSION STANDARDS AND CERTIFICATION LEVELS

			US06			SC03	3	COMPOSITE		
is 166.79 (Bob	FUEL TYPE		NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)	NMOG+NOx (g/mi)	CO (g/mi)	NMOG+NOx (g/mi)	CO (g/mi)	PM (mg/mi)
@ 4K	*	CERT	*	*		*	*			
		STD	*	*	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	*	*		特别的	10.00
		CERT	*	*	1	*	*	0.020	0.8	*
@ UL	GASOLINE- TIER3 E10	STD	*	*	6	*	*	0.083	4.2	*
		BIN		网络沙 克罗金	生物质粒核	ALM NAME OF STREET	100,040	0.030		THE REAL PROPERTY.

WHOLE VEHICLE EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

EVAPORATIVE FAMILY	FUEL TYPE		WHOLE \						
		3DHS (g/test) @ UL			2DI	HS (g/test) (RL (g/mi) @ UL		
		CERT	STD	FEL	CERT	STD	FEL	CERT	STD
LKMXR0140DHG	GASOLINE- LEV3 E10	0.258	0.350	*	0.287	0.350	*	0.02	0.05

ORVR / FUEL ONLY / CANISTER BLEED EVAPORATIVE EMISSION STANDARDS AND CERTIFICATION LEVELS

					FUEL ONLY EVAP & CANISTER BLEED								
EVAPORATIVE FAMILY	ORVR (g/gallon) @ UL			FUEL TYPE	3DHS RIG TEST (g/test) @ UL		2DHS RIG TEST (g/test) @ UL		BLEED CANISTER TEST (g/test) @ 4K				
	FUEL TYPE	CERT	STD		CERT	STD	CERT	STD	CERT	STD			
LKMXR0140DHG	GASOLINE- TIER3 E10	0.02	0.20	GASOLINE- LEV3 E10	0.0	0.0	0.0	0.0	*	*			



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EFFECTIVE LEAK DIAMETER STANDARD AND CERTIFICATION LEVEL (INCHES)									
EVAPORATIVE FAMILY	LEAK FAMILY	CERT	STD						
LKMXR0140DHG	LKMXR0140DHG-JF1	0.00	0.02						

*: not applicable; #: pounds; UL: useful life; PC: passenger car; LDT: light-duty truck; LDT1: LDT<6000#GVWR,0-3750#LVW; LDT2: LDT<6000#GVWR,3751-5750#LVW; LDT3: LDT 6001-8500#GVWR,3751-5750#ALVW; LDT4: LDT 6001-8500#GVWR,5751-8500#ALVW; MDV: medium-duty vehicle; MDV4: MDV 8501-10000#GVWR; MDV5: MDV 10001-14000#GVWR; MDPV: mediumduty passenger vehicle; HDV: heavy-duty vehicle; ECS: emission control system; CERT: certification; STD: standard; FEL: family emission limit; GWR: gross vehicle weight rating; LVW: loaded vehicle weight; ALW: adjusted LVW; LEV: low emission vehicle; ULEV: ultra LEV; SULEV: super ULEV; ZEV: zero-emission vehicle; TZEV: transitional ZEV; TWC/OC: 3-way/oxidizing catalyst; ADSTWC: adsorbing TWC; HAC: HC adsorbing catalyst; WU: warm-up catalyst; NAC: NOx adsorption catalyst; SCR-U or SCRC/SCR-N or SCRC-NH3: selective catalytic reduction-urea/ammonia; NH3OC: ammonia oxidation catalyst; CTOX/PTOX: continuous/periodic trap oxidizer; DPF: diesel particulate filter (active); GPF: PM filter for spark-ignited engine; HO2S/O2S: heated/oxygen sensor; WR-HO2S or AFS: wide range/linear/heated air-fuel ratio sensor; NOXS: NOx sensor; PMS: PM sensor; RDQS: reductant quality sensor; NH3S: ammonia sensor; EGR: exhaust gas recirculation; EGRC: EGR cooler; AIR/AIRE: secondary air injection (belt driven)/(electric driven); PAIR: pulsed AIR; SFI/MFI: sequential/multiport fuel injection; DFI/IFI: direct/indirect fuel injection; TC/SC: turbo/super charger; CAC: charge air cooler; FFH: fuel fired heater; F/P/\$: full/partial/partial with fines on-board diagnostic; DOR: direct ozone reducing; HCT: hydrocarbon trap; BCAN: bleed carbon canister; prefix 2: parallel; (2) suffix: series; CNG/LNG: compressed/liquefied natural gas; LPG: liquefied petroleum gas; E85: "85%" ethanol ("15%" gasoline) fuel; E10: "10%" ethanol ("90%"gasoline) fuel; A: automatic (with lockup); M: manual transmission; SA: semi-automatic transmission; CV: continuously variable transmission; SCV: selectable continuously variable transmission; AM: automated manual transmission; AMS: automated manual-selectable transmission; OT: other transmission; AER: all-electric range; EAER: equivalent AER; PHEV: plug-in hybrid electric vehicle; NMOG + NOx Fleet Ave. Credit for Extended Warranty: N = no credits, Y = credits, S = credits for some/select models

2020 MODEL YEAR: VEHICLE MODELS INFORMATION

MAKE	MODEL	VEH CLASS	ENGINE (L)	TRANS TYPE	EVAPORATIVE FAMILY	EXH ECS	OBD
KIA	OPTIMA	PC	2.4	SA6	LKMXR0140DHG	1	F.
KIA	OPTIMA FE	PC	2.4	SA6	LKMXR0140DHG	1	F